

# Evaluating Road Safety Education, Training and Publicity Projects

A Practitioner's Guide



Date: March 2016



Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

<b><u>Introduction</u></b>	<b>1</b>
<u>What is Evaluation?</u>	2
<b><u>Planning the Evaluation</u></b>	<b>3</b>
<u>Existing Interventions</u>	3
<u>New Interventions</u>	3
<u>Establish goals, aims and objectives</u>	4
<u>Develop a logic model</u>	6
<u>What do you want to find out from the evaluation?</u>	9
<b><u>Doing the Evaluation</u></b>	<b>10</b>
<u>Choose your evaluation methods</u>	10
<u>Collect the data</u>	14
<u>Ethics</u>	15
<u>Analyse the data</u>	15
<b><u>Write up the Evaluation</u></b>	<b>16</b>
<u>Review and Feedback</u>	17
<u>Publish the Report</u>	17
<b><u>Further Reading</u></b>	<b>18</b>
<b><u>References</u></b>	<b>18</b>
<b><u>Appendix</u></b>	<b>19</b>
<u>Appendix A: Methods Table</u>	20
<u>Appendix B: Question Writing Rules</u>	23
<u>Appendix C: Conducting Interviews or Focus Groups</u>	24
<u>Appendix D: Report Writing Tips</u>	25

## Introduction

Road safety practitioners often deliver a number of road safety education, training and/or publicity interventions, including, for example, road safety education resources or workshops for schools or colleges, post-test driver training, cyclist and pedestrian training, road safety videos, posters or leaflets.

It is common to gather and analyse feedback from those who participate in these interventions, but less common to test whether interventions change the participants' knowledge, attitudes, behaviour or risk. This is a problem because some road safety projects have been shown not to improve in the recipient's knowledge (1) or behaviour (2). Some road safety interventions, such as pre-driver education programmes, can even increase risky attitudes (3) or crash risk (4).

Primarily, this guide is aimed at road safety practitioners and provides practical advice on how to plan and conduct an evaluation of a road safety intervention. It can also be used by practitioners who are commissioning or working with an external evaluation agency to specify exactly what you wish the external evaluator to do, and make sure you are getting the best value for money from them.

The guide follows a step by step process:

1. Planning
2. Doing
3. Reporting

This guide focuses on evaluating relatively simple interventions with only one element (a road safety education workshop, for example), but can be used for interventions that have a number of elements (a campaign involving a mix of social media messages, posters, radio adverts and police enforcement, for instance). However, practitioners who are evaluating complex multi-component interventions are advised to seek specialist help from a research or evaluation expert.

## What is Evaluation?

Evaluation is a way to test whether road safety interventions are having their intended effects. Different terms are used to mean describe evaluation, such as measuring impact, monitoring, research, analysis, effectiveness, review, feedback, case studies. This guide defines evaluation as a systematic and scientific way of understanding if something works and/or if it can be improved.

Evaluation can demonstrate whether or not a road safety project is working. It can also highlight areas for improvement and identify the type of improvements that would be beneficial.

This information is useful for:

- Ensuring a real contribution is made to road safety.
- All road safety interventions have the best of intentions but not all make our roads safer. Some have even been demonstrated to increase risky attitudes (3) or the chance of a collision (4).
- Showing value for money.
- If an evaluation demonstrates that a road safety project is working then it can be used to demonstrate that the money was well spent. It can be used to help to support bids for future funding. Some funders may even specify that the project needs to be evaluated in their brief.
- Improving the project
- Any improvements that are identified in the evaluation can be applied to the current project.
- Learning lessons and improving future delivery.

## Planning the Evaluation

### Existing Interventions

#### Decide which existing road safety project to evaluate

If you are involved in a number of road safety intervention projects, you'll probably need to decide which one to evaluate first because you're unlikely to have the time or funds to evaluate them all at once. To prioritise what to evaluate first, think about where you have the most need for information on how effective the activity is or how to improve it. For example, you may prioritise the activity that costs the most money, such as driver training.

If you are not experienced in evaluation, starting with an education or training intervention can be easier than a publicity campaign, as it will be easier to access the audience for evaluation purposes.

Try to start to think about the evaluation as early as possible; ideally when you are planning the intervention. If the intervention is at a later stage, however, it is still perfectly acceptable to start the evaluation later on. There is a similar evaluation process for interventions that have already been planned, are being delivered, or will be repeated in the future, to interventions that have not yet started.

If starting the evaluation after the intervention has been planned you will need to go back and check some of the planning, review the evidence-base for it and check that the aims and objectives are still appropriate. Whilst this information is being checked amendments can be made if necessary.

### New Interventions

#### Establish the Evidence-base for your intervention

If you are planning to create a new road safety intervention then do some background research first. Check local data to assess the scale of the road safety problem to make sure the issue is a priority. If it is, find evidence on what interventions have worked for others by reading research and evaluation reports (see Table 1 for some suggested sources).

Make sure you read these documents with caution – especially if they are not scientific papers. For example, the project may claim to be a success because it increased driver confidence or maybe reached a set number of people. Remember, however, that neither informs you of whether the project was **effective**. Was driver crash risk reduced? Did attitudes change? Were improvements in behaviour seen?

**Table 1 Where to research the intervention**

	Online Link
Scientific journals – articles on individual road safety projects	<a href="http://www.google.com/scholar">www.google.com/scholar</a>
Scientific reviews – review of all the scientific evidence on a certain topic area	<a href="http://www.cochranelibrary.com/">www.cochranelibrary.com/</a> <a href="http://www.roadsafetyobservatory.com/">www.roadsafetyobservatory.com/</a>
Examples from other road safety organisations	<a href="http://www.roadsafetyevaluation.com/reports/">http://www.roadsafetyevaluation.com/reports/</a> <a href="http://www.roadsafetyknowledgecentre.org.uk/">www.roadsafetyknowledgecentre.org.uk/</a>

## Establish goals, aims and objectives

Setting goals, aims and objectives for your road safety intervention describes exactly what you want the activity to achieve. Goals, aims and objectives also specify what it is *possible* to achieve within the parameters of each activity.

### Why do I need to set goals, aims and objectives?

Having a good set of goals, aims and objectives will mean that:

- Your road safety **intervention** is much more focused and well planned. It forces you to think about what is important and what you can realistically achieve.
- Your **evaluation** is much more focused and well planned. Your objectives are what you will measure for the evaluation.

### What is a goal, aim or objective?

**Goal:** A goal is the overall reason(s) for doing a certain road safety activity. This could be something like “To reduce the number of young drivers who are killed and seriously injured within the local authority region”. You will not be able to demonstrate whether any change in collision rates was due to your intervention without a large scale, long term and expensive evaluation. Collision rates can still act as an overall goal, as what you are seeking to *contribute* to.

**Aims:** Your aims are a statement of **what** and **who** you hope to change as a result of the road safety intervention. For example, “To reduce the incidence of drink-driving amongst 17-20 year olds”. You may have multiple aims.

**Objectives:** Objectives are the specifics of what you want to get out of the road safety intervention. It is likely that there will be a handful of objectives associated with each intervention. Each objective might look something like: “To improve the knowledge of the effects of alcohol on driving by 10% by the end of an educational workshop with 17-20 year olds”, “To improve drink-driving attitude scores of 17-20 year olds by 10% within one week of attending an educational workshop”.

Objectives should be SMART, which stands for:

- **Specific** – Drill down to exactly what you are planning to change. Is this knowledge, attitudes, behaviours?
- **Measurable** – Can you measure it? For example, knowledge may be measured by quiz or drink-drive attitudes by using the drink-drive items on the Driver Attitude Questionnaire (5).
- **Agreed** – There may be a number of members of staff delivering the intervention. The intervention may even be run in partnership with other organisations. It is, therefore, important that the objectives are agreed by all those who will be involved in their implementation.
- **Realistic** – Is it feasible that you will achieve the objective? Think about what you can actually control. For example, you will not be able to demonstrate that any change in drink-drive rates were solely due to the intervention as there are numerous other factors which could contribute to this change: other drink-drive campaigns, more general alcohol related campaigns such as Dry January or Stoptober, an increase or decrease in the number of vehicles on the road and so forth.
- **Time-bound** – When do you want to achieve the objective by?

Your objectives are what you will measure for the evaluation. For example, if your objective is to improve knowledge then you will need to have some way to test knowledge. This test will need to be measured against some form of baseline – for example, checking knowledge before attending a workshop or against those who do not attend a workshop.

Try to think of your goals, aims and objectives like a funnel shape – they start broad with goals and then keep getting more specific until you reach your objectives.



## Review your goals, aims and objectives

Writing goals, aims and objectives isn't an easy process. You'll need to review them yourself and ideally get someone else to review them too – especially when you need others (partners, stakeholders) to agree to them. It's common, when going through this process, to get some goals written but to struggle with drilling down into the detail of the objectives. Go back to each objective and check it meets all of the SMART criteria. You'll need to do this every time any changes are made to the objectives.

### Pre-existing road safety interventions

It is equally important to set goals, aims and objectives for road safety interventions that are already being delivered. Although this might seem a bit backwards, it's still important as this will tell you what to measure in the evaluation, and will help everyone to be clear about the purpose of these activities.

If some objectives were set at the time the activity was first set up, check whether they were SMART, and if not adapt them to make them SMART. If formal objectives were not set when the road safety intervention was first delivered then you will need to create some from scratch.

## Develop a logic model

A logic model may sound like a complicated concept but it's really just a glorified project plan. It is a way of checking whether what you are doing has any chance of achieving what you want. It is usually set out on a single piece of paper and follows a trail from what you put into the road safety intervention to what you want to get out of it. An example is provided on the following page.



Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

**Goal:** "To reduce the number of drink-drive related collisions involving young drivers."

**AIM(S):** To reduce the incidence of drink-driving amongst 17-20 year olds

OBJECTIVES	⇒	INPUTS	⇒	OUTPUTS	⇒	OUTCOMES	
						SHORT TERM	LONG TERM
To improve the <b>knowledge</b> of the effects of alcohol on driving by 10% by the end of an educational workshop with college students (17-20 year olds)	⇒	Funding  Staff time: • Researching and writing the workshop presentation and supplementary materials	⇒	Workshop presentation and supplementary materials  Number of workshops delivered	⇒	10% increase in <b>knowledge</b> of the effects of alcohol on driving by the end of the workshop	To see knowledge scores continue to be sustained at their improved levels for six months after the workshop
To improve drink-driving <b>attitude</b> scores of college students (17-20 year olds) by 15% within one week of attending an educational workshop	⇒	• Engaging with schools and colleges to take part in the workshops	⇒	Number of students that participated in the workshops	⇒	15% improvement in <b>attitude</b> scores within one week of attending the workshop	To see attitude scores continue to be sustained at their improved levels for six months after the workshop

**Inputs** are the resources for your project i.e. your costs.

**Outputs** are the actual work you do with those resources – the service and/or products that you develop and deliver.

**Outcomes** are the result of that work and can be short-term (immediate changes) or long-term (changes that happen after a period of time)

**External Factors (outside of your control) that may affect success of the intervention:** Capacity in the timetable the school/college timetable, willingness of schools and colleges to let you come in to run workshops.

**Assumptions (your beliefs about how the intervention outputs will cause the intended outcomes):** That there is some lack of knowledge regarding drink driving in young people, that the workshop develops the knowledge that the students are not aware of, that workshops are an effective way to change attitudes, that changing knowledge and attitudes will ultimately lead to a change in the incidence of drink-driving.

## Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

The information that needs to be put into each part of the logic model is:

- **Goals, Aims and Objectives:** You will have already created goals, aims and objectives before creating your logic model (see section: Establish goals, aims and objectives)
- **Inputs:** Any resources that go into the project. This includes financial costs but also any staff time, materials and so forth.
- **Outputs:** What happens as a direct result of the inputs. For example, an input might be money and an output might be a training day, and its associated costs, such as venue, catering, etc.
- **Short-term Outcomes:** Immediate changes that you want the outputs to achieve. For example, immediately after an educational workshop young people should have improved their knowledge of x, y and z.
- **Long-term Outcomes:** Changes over time that you want the outputs to achieve. For example, six months after an educational workshop, attitudes and knowledge have been sustained at their improved levels.
- **External Factors:** Anything outside of your control that could impact on the success of the road safety intervention. For example, increasing demands on the school timetable has meant that some schools no longer see road safety workshops as a priority.
- **Assumptions:** Anything between the outputs and outcomes stage that you take for granted. For example, young people may already be aware of the information that is provided in the educational workshop, which was not expected.

Identifying external factors and assumptions may highlight parts of the intervention that you could amend to take them into account. If young people, for example, are already aware of some of the drink-drive information, perhaps the workshop can focus on the information they are not aware of or focus on how they can *use* the knowledge to change their attitudes or behaviours.

## Review your logic model

The details of a logic model can be tricky to pin down. Don't worry, this is normal and is part of the purpose of creating a logic model i.e. to check your logic. Make sure you have someone else review the model to check that each step directly flows into the next. Make sure the final model is agreed by anyone involved in the project.

### Top Tips

- Get specific! Try not to use woolly terms; pin down exactly what you will do and what you can **realistically** change by doing it. E.g. instead of 'improving the safety of young drivers' talk about 'improving *attitudes* in relation to drink-driving'.
- Make sure that what you are doing matches your objectives. You won't change attitudes just by telling young people that it's dangerous to drink and drive, so what will you tell them that will change the way they think about drink-driving?

## What about pre-existing road safety interventions?

Even if you are already delivering a road safety intervention it is still worth creating a logic model for it. It acts as a point of focus for all those involved in the project and enables you to check the 'logic' of your activity – is it likely to achieve what you want? It is also an easy way for newcomers to the project to get a handle on what you are trying to achieve. The logic model will also form the basis of the evaluation.

## What do you want to find out from the evaluation?

There are two main types of evaluation. Your choice will depend on what you want the evaluation to do:

1. Improve the design and/or delivery of the road safety intervention
2. Measure how effective the road safety intervention is

You can focus on one of these elements for your evaluation or you may want to look at both at the same time. Your choice will usually be influenced by how well established the road safety evaluation is.

### Improving the design and/or delivery

1. If the road safety project is relatively new and you're doing a small scale test then you may want to focus on improving the design and/or delivery of the intervention. For example, you're unsure of some of the practicalities that will go into delivering an educational workshop so you do a small scale trial run. The evaluation will help you decide what improvements need to be made before you roll out the workshop any further.

Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

## Measuring effectiveness

You may want to focus only on measuring effectiveness if a) you have done some testing and decided what the road safety intervention will look like or b) the intervention has been delivered for some time. For example, you have tested the practicalities of how to conduct the educational workshop and now you want to see if there are any changes in the knowledge and attitudes of young people around drink-driving.

## Doing both (looking for improvements and testing effectiveness)

It's likely that when it comes to evaluating the intervention that you'll want to test its effectiveness *and* improve the design and/or delivery. That's absolutely fine; you can incorporate both of these elements into one evaluation.

## Doing the Evaluation

Whilst doing your evaluation be sure to keep a note of what you are doing. Record the decisions you made and why, and details of what happened, such as how many people took part in the evaluation. This will help you to keep track of the project and will form the basis for your written report or analysis later on.

## Choose your evaluation methods

### Ways to collect data: Quantitative vs. Qualitative

Evaluation methods can usually be put into two basic categories: quantitative or qualitative. Quantitative evaluation is where you measure quantities i.e. you're looking to put a number on something. For example, there was a 10% improvement in knowledge about drink driving.

Qualitative evaluation is the opposite, it instead focuses on quality i.e. you're looking to get really in-depth information with rich detail. These methods are typically used to explore why something is happening. A qualitative evaluation, therefore, might investigate reasons behind why some people drink and drive.

Ideally, you will include both quantitative and qualitative elements in your evaluation to gain a full understanding of what you are trying to investigate. Due to time and cost pressures, however, it is likely that you will focus more on one element than the other. But how do you know which is most useful for your evaluation, quantitative or qualitative? Your decision will come as a result of weighing up a number of factors.

If you are looking to improve the design and/or delivery of the intervention (see [Planning your evaluation: Improving the design and/or delivery](#)), qualitative methods might help you to get at the detail of how best to make those improvements.

Alternatively, if you want to measure effectiveness (see [Planning your evaluation: measuring effectiveness](#)), it might be best to use quantitative methods, so you can put a number on just how effective something was.

Practical factors will also be important. Typically, quantitative methods ask a lot of people some short and snappy closed questions. Qualitative methods, however, tend to ask a small group some in-depth, open ended questions which is likely to take more time for the audience than quantitative methods. Based on this you will need to weigh up if those taking part in the intervention will have the time, flexibility and motivation to take part in the evaluation.

## What methods can I choose from?

There are lots of different methods that fall into the category of either a quantitative or qualitative evaluation.

The main method used for quantitative evaluation is usually some sort of questionnaire or survey. Alternatively, the main method used in qualitative evaluation is usually some sort of interview. This can be one-to-one or with a group of participants (also known as a focus group).

Questionnaires and surveys mainly contain closed questions. People answer by choosing from a pre-defined set of options, i.e. tick box type questions. Surveys are typically either conducted on paper or online. Which type you choose will usually be due to practical factors. For example, it may be easier to provide a paper survey to those on a training course or an online version when there is a list of email contacts readily available. Also think about the balance between how much it costs to print questionnaires versus creating an online version.

Interviews mainly contain open questions so those taking part can provide rich in-depth detail. An interview is usually based on a number of key topic areas. The interviewer can then probe for more information in direct response to what the interviewee has said. It's similar to how an interview on a chat show works.

There are different ways of doing interviews. You can do them one to one or you can do a focus group. A focus group is similar to an interview but the questions are put to a small group of people rather than one individual at a time.

When choosing the type of interview to conduct, consider practicalities. One to one interviews can be done either face to face or over the phone. Focus groups, however, are usually done face to face so the person asking the questions can see how people interact with one another and make sure that no-one is left out. It might be easier to speak to everyone at one time but getting everyone to commit to one time and place can sometimes be tricky.

More information about questionnaires, interviews and other methods can be found in [Appendix A: Methods Table](#).

### Top Tips

Don't rush to choose your methods or create your questions before you've created the aims, objectives and logic model. It can be tempting to rush to get something on paper, especially when you're under time pressure. RESIST that temptation! Without a solid set of aims and objectives the questions you create will be fuzzy – they will not get the information you want and you may have to go back and do it again.

It's useful to have a copy of the aims and objectives in front of you when creating the questions, to keep them focused. Have them to hand too if you make changes to your questions.

### Start where people really are (not where you think they are)

It is important to get in an idea of the starting point of your audience. To do so you should gather some form of before data. For example, to know if you have made a 20% improvement in knowledge after delivering an educational workshop, you will need to know how much the audience knew before the workshop was delivered. Do not assume the starting point is zero. There are numerous other sources where the audience could have learned the information provided in your road safety intervention: other road safety campaigns, friends, family, a driving instructor.

There are a number of ways to collect **before** data. You can still do so even if you have an intervention that is already running. For example, you could collect questionnaire responses before the next group of students take part in a workshop and then ask the same questions of that group afterwards.

If you are unable to contact those who will be involved in the intervention before it takes place then using a comparison group can provide before data. A comparison group is a group of individuals who are not taking part in the intervention, but who are similar to the group participating in the intervention. Their answers, therefore, should be similar to those who are yet to be a part of a road safety intervention.

Some of the most popular and practical ways to collect before data are listed in the following table with an indication of their robustness. These are also known as evaluation designs – a structure to the evaluation which sets out at what time points the evaluation will be conducted, and who with. There are many other designs than those listed here but the following have been chosen as they are able to offer some form of starting point information, without requiring huge amounts of time, resources and expertise to run the evaluation.

Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

	Name	Description	Visual Representation		
			Before	Intervention	After
Strongest	<b>Before and after with a comparison group</b>	Select two groups of people to take part. Collect data from your audience before the intervention. Do the intervention but only with <b>one</b> group (the other group is your comparison group). Collect the same data again, from both groups, after the intervention. Compare the change between the before and after data for both groups. Subtract the comparison group change from the amount of change in the test group.			
			After with a comparison group	Select two groups to take part. Do the intervention but only with <b>one</b> group (the other group is your comparison group). Collect data from both groups <b>after implementing the activity only</b> . Compare the difference in the after data between both groups.	
Weakest	<b>Before and after (no comparison group)</b>	Select one group to take part. Collect data before you do the intervention. Collect data again after the intervention. Compare the difference between the before and after data.			
			<b>After-then-before (post reflection)</b>	Select one group to take part. Do the intervention with that group. Collect data after the intervention. Split your questions into before and after. Get people to answer on what they are doing now (after) and what they <b>remember</b> they were doing before. Compare the (remembered) before and after data.	

The arrows, either side of the table, illustrate the trade off between the strength of the evaluation (i.e. how reliable and valid the results are) and how easy or difficult it will be to run in a practical sense. The stronger your evaluation, the more confident you can be that the results are a true picture of the change caused by the intervention. Stronger evaluations, however, are likely to take more time and money to complete. On the flip side, the easiest evaluations to conduct also tend to be the weakest in designs, which means you cannot be as confident that your findings are an accurate reflection of what is happening.

### What if I find something I wasn't expecting at the before stage?

It's not unusual to find something you were not expecting whilst collecting the before data. For example, you might find that some or most of the workshop attendees are already aware of the key messages on drink-driving, before you have delivered the workshop. If you do find something unexpected then look back at your logic model and your road safety intervention. Will your project do enough to make a difference to the road safety outcomes? Do you need to adapt what you are doing to make it more worthwhile? You could, for example, focus a drink-drive workshop on areas which showed the lowest levels of awareness in a before questionnaire.

### Collect the data

After choosing your method you will then need to start writing some questions so that you can collect your evaluation data. Questions for surveys should mainly be closed i.e. have tick box options. For interviews or focus groups they should be open e.g. How? What? Why?

- See the [Question Writing Rules](#) section of the appendix for advice on how to write questions
- See the [Conducting Interviews or Focus Groups](#) section of the appendix for further interview and focus group advice

### Who should I ask to take part in the evaluation?

The number of people you ask to take part in the evaluation will partly be determined by the number of people who take part in the intervention. If the intervention is delivered to a small group then this limits the number of those who are able to take part in the evaluation. For larger interventions, you do not need all those involved in the intervention to take part in the evaluation; you can select a subgroup of people instead. This subgroup should be a fair reflection of those who take part in the intervention (so no cherry picking the most safety conscious people!). The easiest way to make sure the subgroup will truly represent those who take part in the intervention is to select who takes part randomly.

For surveys try to have at least 50 people take part. For interviews and focus groups, you won't need as many people to be involved because you will be more interested in the depth of information and so it is likely that it will not necessarily generalise to all those who take part in the intervention. You'll need around 4-12 people to take part per focus group (not including those asking the questions). The number of focus groups you will need to do will depend on how many people the intervention is delivered to. Difficulties in recruiting participants may also restrict the number of focus groups you can run. As a rule of thumb, once you find the same themes are coming up in interviews or focus groups and you're not finding anything new, that's the point at which you can stop.



## Ethics

Any evaluation should also take ethical issues into account.

The first thing to consider is getting agreement from those you have asked to take part in the evaluation. The decision to take part should always be a free choice – you can encourage participation, but you shouldn't try to force their decision.

Respondents should also know what taking part in the evaluation means for them. How much time will it take? Is there a chance it might negatively affect them? Consider writing a small paragraph for people to read before they decide whether to take part.

Ideally, any information collected from those taking part should be kept confidential and anonymous. This means removing **any** information that might identify who they are when writing up transcripts and the report. Within a small group of people this may be impossible because sometimes it is easy to infer who the person is from the surrounding information (what they said, the topic they are talking about, phrases they use often). If this is the case then those taking part need to be aware that they might be identified, before they decide whether to take part.

Special care needs to be taken if the evaluation involves children and expert advice may need to be sought. Children should give their consent to take part in the evaluation. There is no fixed age at which children (up to the age of 16) are considered to be able to give informed consent as this depends of the ability of the individual child to understand what is expected of them, what the risks of involvement are and their right to remove themselves from evaluation at any time. However, teachers and other adults working with the children should be able to help you to assess the competence of children and young people to give their consent. Consent may also need to be sought from a parent or teacher.

## Analyse the data

Where you have used closed questions, analysis consists of summarising the answers in a numerical way, for example, "27 respondents (6%) said they would get a lift from someone who has had two alcoholic drinks". This might mean putting values into a table or a graph. Make graphs and tables clear so that someone can understand what they are trying to illustrate without a long detailed explanation, but do also summarise the meaning of the graph or table in the surrounding text. For example, "Figure 1 shows that there was a 10% improvement in attitude scores after the drink-drive workshop."

For open ended questions, one of the easiest ways to analyse them is to look for themes in the answers. What points keep coming up again and again? What points were particularly pertinent? Once the themes are identified write a short summary of the findings and select a few quotes which help to illustrate them. For example, "One of the main concerns raised was that sometimes it may be difficult to put the drink-drive advice into practice. A typical comment was:

"If I'm not the one driving then it can be awkward to tell someone to stop drinking, or not drink at all, when they are being polite enough to give me a lift home" (Focus Group Member 1)

## What does the data tell you?

Once you've collected and analysed the evaluation data, it's time to understand what it means. What is the information telling you? How does one question or one theme relate to another? Ultimately you are trying to answer the big question - did your road safety intervention achieve what you wanted it to? Jot down some notes at this stage – they will form the basis of the Conclusions section of your evaluation report when you write this up later.

Once you have understood what you found out from the evaluation, decide what to do as a result. Did you find what you were expecting? Are there any improvements that you could make to the intervention? Do you need to do something else entirely? Again, make some notes whilst you are thinking about this – they will form the basis of your Recommendations in the evaluation report.

### Top Tip

Don't underestimate the amount of time you will need to do analysis, especially where you have used open ended questions.

## Write up the Evaluation

The following describe what to include in the main sections of an evaluation report:

**Introduction:** Introduce the problem i.e. What was the reason for conducting the road safety intervention? Why did you choose to do that intervention over something else? If you used previous research evidence to find out what interventions were likely to work, include what you found here. Finish off by describing your aims and objectives.

**Methods:** Here you should describe how the evaluation was conducted. E.g. did you want to find out the effectiveness of an activity and/or improve it? Describe what methods were used. When and how you collected data (e.g. before and after the intervention) and whether you used a comparison group. Remember earlier in the "Doing Your Evaluation" section when it said "make a note of the decisions you make"? Find those notes as they will be invaluable.

This section should be concise but include enough information so that someone else could repeat what you did.

**Results:** Describe what you found. Include any graphs or tables that were created in the analysis, as well as a running commentary of what they show. For interview results describe each of the themes that were found and use a small number of quotes to help illustrate each theme. This section may be the longest part of the report.

**Conclusions:** In this section provide an overall summary of what the results show. Were the objectives met? What do the results actually mean in the wider context of your problem? If you made some notes after going through the “[What does the data tell you?](#)” section then use them.

**Recommendations:** What would you recommend on the basis of what you have found out? If the objectives were not met, what do you advise should be done about it? Are there any further improvements that could be made even if the objectives were met?

**Executive Summary (Optional):** Include an Executive Summary if you have a particularly lengthy report. Summarise what the report says. Make it the last thing you write but insert at the start of the report. Usually this section should not be longer than two sides of A4.

Further tips on report writing can be found in [Appendix D](#).

## Review and Feedback

After putting in the time and effort of doing an evaluation don't let the report sit on a shelf. The whole purpose of an evaluation is to see if something is working and to improve it. If the intervention didn't work in its current form, can you change it or do you need an entirely new approach? If it did work, are there any improvements that would make it even better?

Once you have written the report meet with those who deliver and project-manage the intervention. Discuss the evaluation report, paying particular attention to the conclusions and recommendations. Where possible, actions should be assigned to particular members of staff to ensure that the recommendations are implemented. Follow up to ensure these changes have been made.

## Publish the Report

Evaluation reports can be published on websites such as [www.RoadSafetyEvaluation.com](http://www.RoadSafetyEvaluation.com) or the [Road Safety GB Knowledge Centre](#). The evaluation will help to establish best practice regardless of whether the evaluation came out positively or negatively. Other's can learn from where things have gone well and avoid repeating any aspects that have not.

Reports produced using E-valu-it on [www.RoadSafetyEvaluation.com](http://www.RoadSafetyEvaluation.com) can be published privately (this keeps them confidential to the stakeholders you choose) or publically. Public reports appear on the website for anyone to read.

Reports can be published privately first and publically later – for example, when they have been approved by a management committee or funder. When you have published a report publically, consider promoting your findings in a press release, on social media, in conference speeches etc. This will help to share your findings so others can benefit from them.

## Further Reading

[www.RoadSafetyEvaluation.com](http://www.RoadSafetyEvaluation.com) An online resource with lots of additional advice and information on how to conduct road safety evaluation projects. It also hosts the E-valu-it toolkit – a set of questions about your evaluation project to complete before you start the evaluation. It will then give a set of recommendations about how to do the evaluation.

[www.RoadSafetyObservatory.com](http://www.RoadSafetyObservatory.com) An online resource which provides key facts and reviews of scientific research relating to road safety.

**Department for Transport.** *Guidelines for Evaluating Road Safety Education Interventions.* 2004. A guidance document on how to evaluate road safety education programmes. Useful for if you are evaluating an educational activity but the advice should also apply to other forms of road safety initiative.

**RoSPA.** *ScootSmart: A Case Study in Evaluation.* 2014. A case study report on an organisation conducting their own evaluation on scooter training in schools. It's a good document for learning what the practical challenges are in conducting your own evaluation.

**Kara, H.** *Research and Evaluation for Busy Practitioners: A Time-Saving Guide.* 2012. This is a book on research and evaluation. Good for if you want some more detail than this guide but it is still accessible for those who aren't experts in evaluation.

## References

1. *An evaluation of a safety education program for kindergarten and elementary school children.* **Luria, J W, Smith, G A and Chaprman, J I.** 3, s.l. : Archives of Pediatrics and Adolescent Medicine, 2000, Vol. 154.
2. *Children and road safety: Increasing knowledge does not improve behaviour.* **Zeedyk, M S, et al.** 4, s.l. : British Journal of Educational Psychology, 2001, Vol. 71.
3. *Evaluating a Novice Driver and Pre-driver Road Safety Intervention.* **Glendon, A I, et al.** 2014, Accident Analysis and Prevention, pp. 100-110.
4. *School-based driver education for the prevention of traffic crashes.* **Roberts, I, Kwan, I and Reviewers, Cochrane Injuries Group Driver Education.** 2001, Vol. 3.
5. *Modifying Beliefs and Attitudes to Exceeding the Speed Limit: An intervention study based on the theory of planned behaviour.* **Parker, D, Stradling, S G and Manstead, A S.** s.l. : Journal of Applied Social Psychology, 1996.

## **Appendices**

A: Evaluation Methods Table

B: Question Writing Rules

C: Conducting Interviews or Focus Groups

D: Report Writing Tips

## Appendix A: Methods Table

Survey Method	Description	When to Use
<b>Questionnaire</b>	<p>A series of questions given to participants to complete. Questions can be open or closed but most are closed with set response options, e.g. 'Yes or No', or: 'Almost always, Quite Often, Sometimes, Rarely, Never'.</p> <p>Can include opinion polls, multiple choice questions, and attitude scales. An example of an attitude scale would be asking respondents to rate how strongly they agree or disagree with a range of statements.</p>	<p>You are looking for very particular information. You are interested in self-reported opinions, attitudes, or behaviours.</p> <p>You want to collect a limited amount of data from a large number of people.</p> <p>You want to be able to perform statistical analysis.</p>
<b>Structured Interview</b>	<p>Very similar to a questionnaire except in a structured interview the questions are asked by an interviewer, and not just given to the participants to complete themselves. This could be done over the phone or face-to-face. The interviewer asks the same questions, in the same way, and in the same order, to every participant (this is why it is called a structured interview).</p>	<p>You are looking for very particular information. You are interested in self-reported opinions, attitudes, or behaviours.</p> <p>You want to collect a limited amount of data from a large number of people.</p> <p>You want to be able to perform statistical analysis.</p> <p>You are unsure if respondents can read and write well.</p>
<b>Semi-structured Interview</b>	<p>A more loosely structured interview, where not all questions are pre-determined. The questions act as a guide. The interviewer has a list of topics to ask about, with some more specific questions relating to those topics in mind. The interviewer can respond to answers given, and probe further - as you would in a conversation. The questions do not have to be asked in the same way to everybody, and the interviewer can add or expand on questions as appropriate. The questions are always open ended. The loose structure means that some basic questions will be asked of everyone, making it easier to compare responses of different participants.</p>	<p>You are looking for detailed information about people's views, experiences, and feelings.</p> <p>You want qualitative data from a reasonable sized sample.</p> <p>You want to explore issues, some of which may be sensitive.</p>

Evaluating Road Safety, Education, Training and Publicity Projects: A Practitioner's Guide

<p><b>In-depth Interview</b></p>	<p>The least structured of all the interviews. The researcher develops a 'topic guide' of the issues to be explored and has an idea of the type of questions to ask within those topics. There may be other relevant topics introduced by the participant that the researcher had not previously thought of. Provided these relate to the aim of the study, the researcher is free to explore those topics, and allow the participant to guide the interview.</p>	<p>You want very detailed information about a few individuals' views, experiences, or feelings.          You want to understand the participants' perspective as much as possible.          You want the participant to 'tell you about' the issue you are interested in.          You want to learn about an issue, rather than confirm or refute a pre-conceived theory about people's thoughts or behaviour.          You are asking about very sensitive issues.</p>
<p><b>Focus Groups</b></p>	<p>A semi-structured interview with a group of people who share some characteristic(s), e.g. they may all be van drivers. Usually a minimum of 4 and a maximum of 12 people form a group, plus the facilitator. It is helpful to have two facilitators.          A focus group is more than a group of individuals responding to the same questions. Responses emerge from the group interactions, with people discussing views with each other, and reflecting.          Data is normally analysed qualitatively.</p>	<p>When you want to know about a particular groups' views, experiences, or feelings.          When you want to know the degree to which those views are shared by the individual members of the group.          When you are researching a group of people you have not had much contact with before, and you want to understand their points of view better.          When you want to find out initial responses to a proposed or pilot intervention.</p>

## Non-Survey Methods


Method	Description	When to Use
<b>Observation</b>	<p>Visual observation of people's behaviour, either by the researcher or a camera. People's behaviour/actions are observed in real time, and in a natural setting. Provides mostly descriptive data but these do allow for inferences. For example: if you observe a theatre in education presentation and record that some audience members were crying, you can assume that they were affected emotionally by the presentation. Similarly, if participants are not paying attention to a presentation, or are talking about unrelated matters with the person next to them, you can assume that they are not engaging with the presentation.</p> <p>If repeat observations are made over time you can make some inferences about cause and effect.</p> <p>There are different types of observation study. For instance, they can be structured: where you make observations of certain people and certain behaviours, at set time intervals, or unstructured. In unstructured observations you record anything you think is of interest, at any time. Structured observations provide more quantitative data.</p>	<p>When you are interested in behaviours that you can observe occurring in a public place.</p> <p>When you want to monitor the process of something, training sessions for instance, and you want to observe how they were actually delivered.</p> <p>When participants might not be <i>willing</i> to give you the information you want, using other methods. For example, not all participants may admit to using hand-held phones while driving, if asked in a survey.</p> <p>When participants might not be <i>able</i> to give you the information you want, using other methods. For example, participants in a training workshop may not be aware of the true degree of particular types of interaction between trainer and trainees.</p>
<b>Document Analysis</b>	<p>The study of existing text documents relating to an intervention. This is secondary data as it is data already created for a purpose other than your evaluation. This could be attendance records, statistics, minutes, work schedules and timetables, complaints, publicity materials, newspaper reports, diaries, and so on.</p>	<p>When you want additional information to fill out, or support, what you already know through other methods of data collection.</p> <p>When you cannot easily collect the data first-hand, especially when the intervention started before the evaluation was planned.</p> <p>When you need base-line data, for instance, the percentage of 17-24 year olds involved in road crashes in your area.</p>




## Appendix B: Question Writing Rules

These rules should be used equally whether you are writing questions for a questionnaire or interview. Don't underestimate how difficult it is to write questions. It's important to get them right. Rubbish in means rubbish out i.e. you won't be able to make any useful conclusions based on the results if you do not get the questions right.

- Keep questions **short**.
- Avoid asking **two questions** in one e.g. "How enjoyable and informative did you find this workshop?" 'Enjoyable' and 'Informative' are two separate things.
- Make questions **unambiguous** – ensure everyone will understand the question in the same way. E.g. the word crash might include bumps in the car park to some people and not others.
- Avoid **jargon and abbreviations** e.g. Syndicate or ADI (Approved Driving Instructor)
- Avoid **leading** questions e.g. "how enjoyable did you find the training?" Instead use "please rate how enjoyable or unenjoyable the training was".
- Avoid using **two negatives** in one question e.g. How much do you agree with 'I would never not wear a seatbelt'?
- Avoid **surplus** questions – are you tacking-on a question just because you can? Does the question ask something different to the other questions? You'll be restricted by time too (questionnaires should take around 10-20 minutes, interviews and focus groups should last around 30 minutes-1 hour 30).
- Use **closed questions** for questionnaires and **open questions** for interviews or focus groups. (You can use a small number of open questions in a questionnaire or a small number of closed questions in an interview but keep them to an absolute minimum).
- **Pre-test** questions – Select a small number of those you are going to ask the questions to and get them to answer the questions. If possible, also have a colleague review your questions against this checklist.
- Be **specific** about what you are asking – e.g.

 'Please rate this course on a scale of 1-5, with 1 meaning Poor and 5 meaning Excellent'

 'Please rate the following aspects of this course on a scale of 1-5 with 1 meaning Poor and 5 meaning Excellent' (Opportunity to ask questions, Knowledge of presenters, Use of Examples...)

## Appendix C: Conducting Interviews or Focus Groups

### Writing a topic guide

A topic guide provides the structure and content for an interview or focus group. It's similar to a questionnaire but much less restrictive. Instead you prepare a list of around 5-10 key topic areas that you want to cover. You might also prepare some suggested follow-up questions for each topic. Your questions should still follow the rules around question writing.

As interviews or focus groups are more flexible you don't need to "stick to the script". Aim to cover all the topics but you don't need to do so in a set order; try to follow the natural flow of the discussion. The topic guide is there to help you focus the conversation but also to follow up on any points of interest. This might mean creating questions on the spot and so it's more difficult to stick to the rules of question writing. The easiest trap to fall into is asking a leading question. Try to be conscious of this and practice with a colleague before-hand.

### The practicalities of doing an interview or focus group

- **Record the conversation:** You won't capture everything by writing notes, there could be some really important points that you miss if you do not record the conversation. Your workplace may already have the capacity to record calls, if not there are devices that you can purchase that attach to the telephone. Use a Dictaphone to record focus groups, preferably using two at the same time. Be sure to get permission to record the conversation from those taking part. Transcribe the recording after the interview or focus group.
- **Numbers:** For focus groups have two interviewers – one to lead the questions and the other to look after refreshments or potential interruptions. Each focus group should consist of 4-12 people (not including interviewers). One or two focus groups will probably give you the amount of information you need. For interviews have around 10-15 individuals taking part, although large businesses may need more to cover the full scope of the company.
- **Length:** Interviews or focus groups should take around 30 minutes - 1 hour 30 minutes to complete. As interviews are one-to-one they will tend to come at the lower end of this bracket. Focus groups are at the higher end to account for the input of a number of people.
- **Have a short introduction at the start of the group:** Have everyone introduce themselves at the start of the focus group, maybe say a line about themselves too. This will help the group feel comfortable talking with one another and help anyone typing up the conversation later to distinguish who is who. If someone is not comfortable using their real name allow them to use a nick name or a fake name.

## Appendix D: Report Writing Tips

### Get yourself organised

- Set a deadline for completing subsections of the report as well as for the final version.
- Start writing the Introduction section when you start the evaluation project, even if it's a rough draft. This will be the time when you are deciding what road safety intervention to do and why, which is what you need to describe in your introduction.
- Start writing the Methods section as you are doing the evaluation, even if it is a rough draft. Make a note of what you did for the evaluation and why.
- Build in some time for you, your team and key stakeholders to review a draft version of the report before the deadline for the final version.
- Keep the project folder on your computer organised. Make sure anyone new on the project can easily find their way around. Have a 'previous versions' folder where you keep old drafts of documents; only keep the latest version of documents in the rest of the folder.

### Writing style and format

- Try to use simple, concise and short sentences. E.g., don't write "There are different ways of going about doing interviews", write "There are different ways of doing interviews"
- Write in plain English, without jargon or acronyms where possible. If these are used make sure they are defined at least on their first mention in the document. E.g. Education, Training and Publicity (ETP).
- The length of the report should suit your audience. For example, middle management may need more detail than senior managers, if they are the ones implementing the report's recommendations. Where reports are lengthy consider writing an Executive Summary section.
- Use headings to help break up the report.
- Give tables and graphs a title and a number. They should also be able to be understood independently, without any reference to the text surrounding it.
- If you quote or talk about someone else's idea then credit them for it. Cite it in the text and use a references page if necessary.
- Don't assume the appendix will be read. If the report doesn't make sense without that item then put it, or a summary of it, in the main part of the report. Restrict the appendix to things like copies of questionnaires or topic guides.



accidents don't have to happen

---

**RoSPA Head Office**

28 Calthorpe Road  
Birmingham  
B15 1RP  
☎ +44 (0)121 248 2000

**RoSPA Scotland**

43 Discovery Terrace  
Livingstone House  
Heriot-Watt University Research Park  
Edinburgh  
EH14 4AP  
☎ +44 (0)131 449 9378/79

**RoSPA Wales**

2nd Floor  
2 Cwrt-y-Parc  
Parc Ty Glas  
Cardiff Business Park  
Llanishen  
Cardiff  
CF14 5GH  
☎ +44 (0)2920 250600

**General Enquiries**

☎ +44 (0)121 248 2000  
☎ +44 (0)121 248 2001  
✉ [help@rospa.com](mailto:help@rospa.com)  
🐦 [twitter.com/rospa](https://twitter.com/rospa)  
📘 [facebook.com/rospa](https://facebook.com/rospa)  
🌐 [linkedin.com/rospa](https://linkedin.com/rospa)

**[www.rospa.com](http://www.rospa.com)**

Registered Charity No. 207823  
VAT Registration No. 655 131649

